Ecocriticism, Biopolitics, and Ecological Immunity

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Abstract

Ecocritics tend to think of environmentalism as a form of resistance against the anthropocentrism of Western modernity. Such a view stands in contrast to biopolitical theory, which sees modernity in terms of a naturalization of the human and a generalized effort to increase the productivity of life that cuts across species lines. Building on the work of Roberto Esposito, this process can be described as a radicalized form of ecological immunization whereby humans and their domesticates are protected from the risks that attend membership in ecological communities, resulting in an "unnatural growth of the natural" (H. Arendt). The self-destructive strategies of immunization which characterize biopolitical modernity are based on a conception of life in terms of competition over scarce resources, inevitably leading to Malthusian crises. Lynn Margulis' understanding of evolution as symbiogenesis offers an alternative on which an affirmative biopolitics balancing the demands of immunity and community can build.

Keywords: Biopolitics, ecocriticism, Roberto Esposito, Garrett Hardin, Lynn Margulis, Neomalthusianism, Elinor Ostrom, symbiogenesis.

Resumen

Los ecocríticos tienden a concebir el ecologismo como una forma de resistencia frente al antropocentrismo del occidente moderno. Esa visión contrasta con la teoría biopolítica, que ve la modernidad como una naturalización del ser humano y un esfuerzo generalizado por aumentar la productividad de la vida que trasciende las fronteras entre especies. Basándose en el trabajo de Roberto Esposito, este proceso puede describirse como una forma radicalizada de inmunización ecológica por la cual los humanos y las criaturas domadas por ellos están protegidas de los riesgos que entraña pertenecer a una comunidad ecológica, resultando en un "crecimiento antinatural de lo natural" (H, Arendt). Las estrategias autodestructivas de inmunización que caracterizan la modernidad biopolítica se basan en una concepción de la vida en términos de competición por recursos escasos, llevando inevitablemente a crisis malthusianas. El entendimiento de la evolución de Lynn Margulis como simbiogénesis ofrece una alternativa sobre la que puede construirse una biopolítica afirmativa que equilibre los requisitos de inmunidad y comunidad.

Palabras clave: Biopolítica, ecocrítica, Roberto Esposito, Garrett Hardin, Lynn Margulis, neomalthusianismo, Elinor Ostrom, simbiogénesis.

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If there is something like a master narrative which has guided the ecocritical mainstream over the last three decades or so, it might be glossed as follows: Western modernity instituted a categorical separation between nature and culture, the animal and the human, which licensed the subjugation and exploitation of the former to the benefit of the latter. The task of ecocriticism, and of the environmental movements to which it is allied, is to dismantle this anthropocentric illusion of human separateness and to remind

people that they, too, are a part of nature, thus putting an end to ecological destruction and repairing what modernity had put asunder.

This story runs counter to another line of thought which suggests that, on the contrary, the hallmark of modernity is precisely the naturalization of the human, i.e. the erasure of the dividing line which, in the Western tradition, had distinguished human beings from other animals, and the gradual evacuation of the unique characteristics—such as the possession of a soul, of consciousness, language, and so forth—which had underwritten this distinction. Thus, Alexandre Kojève, for example, in his influential interpretation of Hegel's *Phenomenology of Spirit*, saw universal history as converging towards a state in which humans would become "post-historical animals" (159). Martin Heidegger viewed the reduction of the human to its presumed biological essence as the decisive danger of modern thought, and Hannah Arendt argued that the ascendancy of labor (which aims merely at the reproduction of natural life) over work and action (which constitute a distinctly human world) had precipitated an "unnatural growth of the natural" (47) which was crowding out the spaces of genuine human self-fashioning. This line of argument leads up to what, after Michel Foucault's work on the subject in the late 1970s, came to be known as the theory of biopolitics. From this vantage point, environmentalism appears not as a repudiation of modernity, but rather as its logical culmination: it is the ultimate expression of a way of thinking in which the reproduction of biological life itself is instated as the unsurpassable horizon of all collective human activity, the finality towards which all political efforts must be oriented.

There is perhaps no aspect of environmentalist thought where such a view acquires greater salience than with regard to the question of "overpopulation," as I tried to show in my own contribution to the special issue Margarita Carretero Gonzalez and I co-edited for *Ecozon@* in 2018 ("Malthusian Biopolitics"). The exponential growth of the human population over the past two centuries is itself a direct result of the new modes of governance which Foucault had in mind when he initially adopted the term biopolitics. From the late eighteenth century onwards, Foucault argued, the power of the state came to be viewed increasingly as an instrument whose proper purpose was to regulate and administer the lives of its citizens so as to increase their productivity. The state and its various non-governmental auxiliaries became more and more involved in issues of hygiene, nutrition, and public welfare, and they began to actively promote the production of useful knowledge to this end. Breakthroughs such as Justus Liebig's discovery of the role of nitrogen in plant growth (Brock) or Louis Pasteur's development of the germ theory of disease (Latour) were direct outcomes of the new state-sponsored laboratory science. They were instrumental in mitigating the twin threats of famine and disease and thus made possible a dramatic increase in human numbers.

The efficacy of biopolitical governance flows precisely not from the assumption of a categorical difference between humans and the rest of nature but, to the contrary, from the realization that humans are just one biological species among others. It is no coincidence that Liebig advocated not only for the use of fertilizers in agriculture, but was also involved in promoting Liebig's Extract of Meat, which essentially was supposed to do for human beings what guano was doing for plants (Brock 218-21). The most immediate

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outcome of the proliferation of biopolitical strategies has not been the *destruction* of nature, but rather, to quote Arendt again, its "unnatural growth" (47). Crucially, the increase in biological productivity is not limited to humans: since the Industrial Revolution, the total biomass of terrestrial megafauna has increased at least by a factor of ten – with humans accounting for only about a third of this amount (Barnosky 11546). Much of this is of course the result of industrial stock raising—a practice which might be seen as furnishing a perfect example of the sheer ruthlessness with which humans dominate non-human nature. Yet the technological and administrative procedures that have led to this proliferation of living bodies, both human and nonhuman, are very nearly the same (Wolfe 9). Seen in this light, the distinctive feature of biopolitical modernity is thus not so much the subjugation of nature at the hands of humans, but rather the penetration of all kinds of biological processes by forms of power whose aim it is to maximize their productivity.

In a biopolitical context, the dividing line that matters is no longer that between nature and culture, or between the human and the nonhuman, but rather between those bodies that are amenable to improvement and those which aren't and can therefore be sacrificed for the benefit of the former. Malthusian thinking, both in its original formulation and in the environmentalist versions that came to the fore after WWII, has always been concerned with the drawing of this line (Mitchell 21-25). Malthusianism renders human life as a fully biological phenomenon, and it starts from the assumption that all biological life is characterized by a tendency towards harmful excess, a tendency that must be countered by deliberate pruning and culling. In order for life to flourish, its generative power must be hemmed in, life negated in the name of life. Roberto Esposito has encapsulated this paradoxical logic in the conceptual figure of immunity—a term which, straddling the domains of biology and the law, provides the key to understanding the perverse dynamic by which a politics emphatically committed to the protection of life could engender genocidal violence at an unprecedented scale. Esposito is referring to the Holocaust, but the point applies equally well to the ways in which the biopolitical immunization of modern society has led to the devastation of vast swathes of the biosphere.

The usefulness of Esposito's thought lies precisely in that it allows us to grasp the profound ambivalence of this situation. Esposito does not simply denounce immunity. In juxtaposing it with community (both words derive from the same Latin root *munus*, referring to a debt or an obligation), he does not posit the two terms as absolute alternatives between which one could choose, but suggests rather that we see them as standing in a necessary and productive tension. Every form of immunity constitutes a community, and every form of community provokes a countervailing drive towards immunity. Immunity functions as a kind of "fold that […] separates community from itself, sheltering it from an unbearable excess" (*Bios* 52). Those who adhere to the story I have sketched at the outset—the narrative which describes modernity in terms of humans subjugating nature—also frequently speak of the need to recognize human membership in the ecological community. But in its original meaning, ecological community is just another word for the food chain—and to be a member of the food chain means nothing

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other than to be predator and prey, host to parasites, subject to hunger and disease. By giving life to its members, ecological community saddles them with a debt whose repayment all seek to avoid for as long as they can. Every living organism wants to eat but not be eaten.

It makes no sense, then, to think of the drive towards ecological immunity which is such an essential component of biopolitical modernity as something which divides humans from nature. What modern society has wrought in its effort to keep humans well-nourished and happy is the radicalization of a tendency which is a general feature of biological life. The problem lies not in immunization as such, but rather in the specific form it has assumed in modernity. Elaborating on Foucault's suggestion that liberalism furnished the "general framework of biopolitics" (Foucault, *The Birth of Biopolitics* 23), Esposito traces the formation of biopolitical modernity through the development of three key categories of liberal thought: sovereignty, property, and liberty. Thomas Hobbes conceived of sovereign power as an antidote to the internecine violence that afflicts human beings in the state of nature. In a world that is given to all in common, the natural impulse to self-preservation pits each individual against all others, engendering perpetual strife. People inoculate themselves against this threat by instituting a state monopoly on the use of deadly force. Because this protection is itself fraught with danger, it is supplemented with the concept of individual rights which form a second layer of immunitary protection (*Bios* 63-66). Thus, modernity was set on a trajectory in which every expansion of individual liberties is complemented by an expansion of state power in order to secure them, and every expansion of state power by measures which secure the life of the individual against that same power. And, therefore, we have arrived at a form of collective existence which claims to prize freedom above all else, at the same time that it entangles individuals in an ever more dense web of dependencies (Bergthaller, "Fossil Freedoms").

The free individual and the sovereign state, the private and the public, are the two millstones between which the common world—a world which is "everybody's and nobody's, nobody's because it [is] everybody's" (Esposito, "Community" 89)—is ground to dust. No one articulated this logic with greater clarity than Garrett Hardin. A leading light of the Neomalthusian revival of the 1960s and 1970s, Hardin argued in "The Tragedy of the Commons" (1968) that a resource whose use was open to all would invariably be destroyed by overuse—and that the only way to ward off this fate was to convert such resources into private property or to place them under the public trust. This has always been the rationale of colonial powers and state-backed companies: local communities should be expropriated because their forms of land use are wasteful, inefficient, or destructive. But Hardin went much further: staving off the tragedy of the commons on a planetary level would require state-imposed limits on reproductive freedom. Thus, he pushed the biopolitical calculus to its logical terminus, where the defense of life and liberty collapses into naked coercion.

In the 1970s, Neomalthusian thinkers openly acknowledged the disturbing political implications of their views. William Ophuls, for example, suggested that the return to a world of scarcity would exert "overwhelming pressures toward political

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systems that are frankly authoritarian" (216). It is tempting to believe that such debates belong to a dark chapter of environmentalism which we have safely left behind. My sense is that they are more relevant than they ever were, as the growing recognition that we are living in a state of "climate emergency" converges with the development of new and increasingly sophisticated forms of algorithmic governance and biosurveillance. It is far from obvious what kind of social organization would be able to preserve the liberties we enjoyed during the roughly two centuries when we believed to have dispelled the "Malthusian curse" (Ladurie 311) whilst also reining in harmful human impacts on the Earth system. But Esposito's plea for an "affirmative biopolitics" based on a conception of the "common good" (as distinct from the "public good," which is merely the obverse of the private; "Community" 88) may point us into the right direction.

Such a biopolitics must build on a conception of life different from that of classical Darwinism, which had formed the basis of Hardin's argument in the "Tragedy of the Commons." The Malthusian formula according to which the natural increase of biological organisms always tends to exceed available resources had furnished Charles Darwin with his principal mechanism for natural selection. Evolution was conceived in terms of a competition between discrete, individual actors (e.g. organisms, populations, or genes) over scarce resources. This fundamentally agonistic model of evolution dominated evolutionary biology until recently. It was above all the American biologist Lynn Margulis whose work ushered in a new understanding of life. In the 1960s, she proposed that eukaryotic cells were the product of endosymbiosis, whereby one type of bacteria had incorporated another, with a more complex organism arising from their fusion. Over the following decades, Margulis generalized this insight, arguing that symbiotic cooperation between organisms had been an important factor at every stage of evolution, such that all organisms are in fact not "in-dividuals" (i.e., indivisible units), but rather "symbiotic assemblages," as Donna Haraway puts it (60). Margulis also became an important collaborator of James Lovelock, whose Gaia hypothesis scales up the logic of symbiosis to a planetary level.

Margulis' conception of evolution as symbiogenesis complements the "principle of competition" that is at the heart of classical Darwinism with a "principle of cooperation" (Rheinberger). It also resonates with the sustained critique which Hardin's "Tragedy of the Commons" was subjected to in the social sciences. The economist Elinor Ostrom and her collaborators showed that Hardin's assertions were empirically wrong, and that there were in fact many instances were communities had developed ways of cooperating in a manner that allowed for the sustainable use of common pool resources over the long term (Horn and Bergthaller 88-90). Crucially, though, the success of these forms of cooperation always involves that access to the resource be in some way constrained, that a boundary be drawn between those who are allowed to use it and others who are excluded. A commons is a form of collective immunity, and as such its functioning is predicated on a distinction between an inside and an outside. Now that we have come to understand that the biosphere, in its coupling with the other geospheres, constitutes the ultimate immunitary envelope, sheltering all of life from the lethal emptiness of space, can we conceive of a biopolitical form commensurate with the planetary commons?

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As ecological conditions deteriorate, the immediate impulse will surely be to shore up existing immunitary defenses. Those who have the good fortune of living in a well-functioning nation state will appreciate its ability to protect them from the worst political and ecological turmoil, and they will jealously guard that privilege. Those who have the even better fortune of owning a literal fortune will be tempted to leave the badly leaking ship of the nation state and withdraw into a private bunker located in some relatively placid corner of the planet (Rushkoff 183), or perhaps to skip the Earth altogether, as imagined in countless science fiction novels and films. In the end, however, such strategies merely extrapolate the self-destructive drift of biopolitical modernity into the future. In the words of Roberto Esposito: "Immunity, necessary to the preservation of individual and collective life [...], if assumed in a form that is exclusive and exclusionary toward all other human and environmental alterities, ends up counteracting its own development" ("Community" 86). In order to avoid this fate, an affirmative biopolitics must reckon with the fact that all local forms of immunization are finally conditioned on the viability of the Earth system. To ecocritics, this will hardly come as news. What the biopolitical perspective I have tried to outline here further suggests, however, is that we must also avoid the mistake of denouncing all forms of ecological immunization as expressions of human exceptionalism. The human tendency to ensconce ourselves in artificial environments that buffer us against fluctuating conditions in the surrounding world is not a mark of anthropocentrism. It reflects a basic necessity of all organic life.

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